



INSTALLATION & USER'S GUIDE

Africa Twin TorqDrive® Clutch
for cable-actuated bikes

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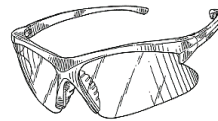
OVERVIEW

This kit replaces many of the OE (Original Equipment) or “stock” clutch parts with your new Rekluse TorqDrive® clutch parts. The following parts are replaced:







- This kit will replace all the OE frictions and drive plates with a Rekluse thin friction clutch pack.

INSTALLATION TIPS

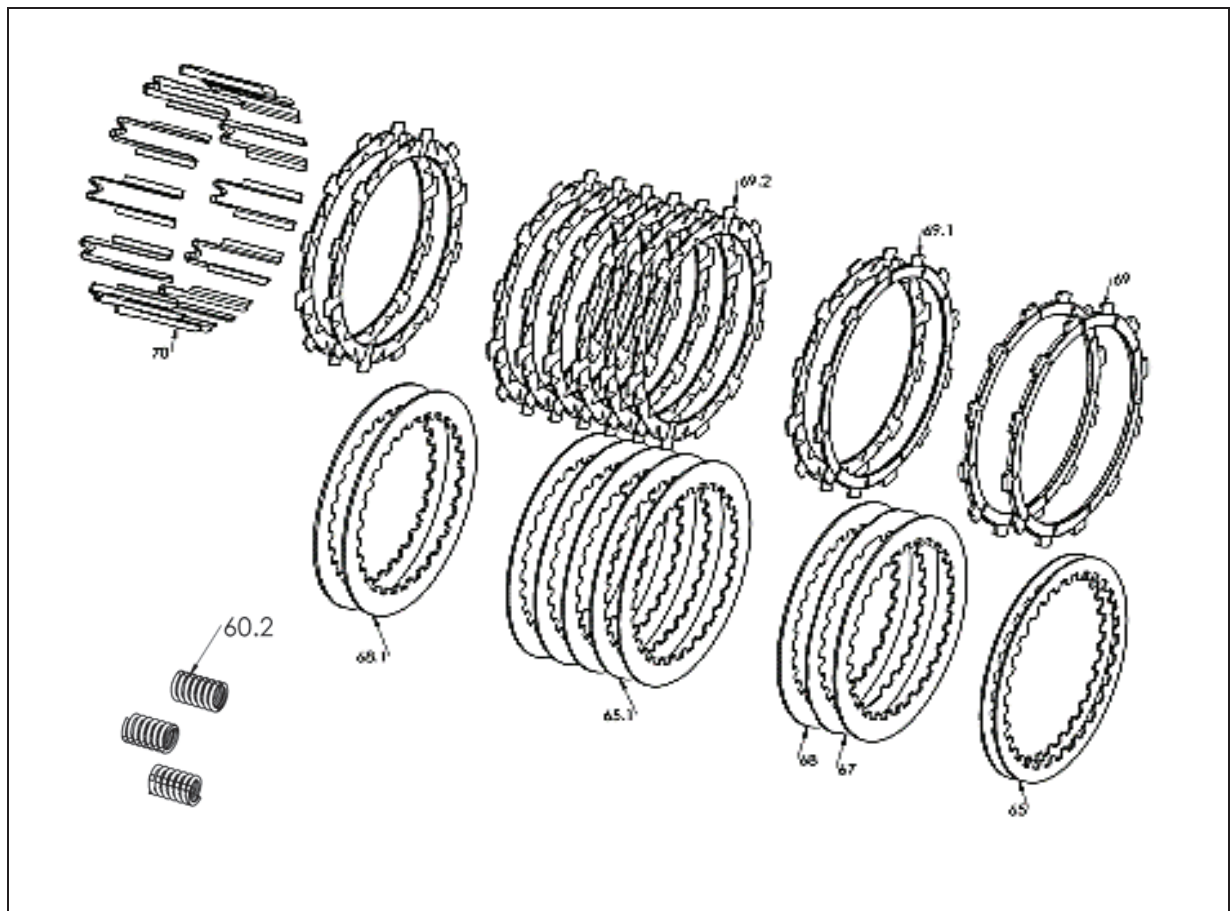
- Read the separate included Safety Information document before operating the vehicle with the product installed.
- Read this entire document before performing any steps.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation and User Guide** before operating the bike with the product.
- Protect eyes and skin – wear safety glasses and work gloves. Work in a well ventilated area.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.
- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements. Rekluse offers Factory Formulated Oil™ developed specifically for Rekluse products. Rekluse Factory Formulated Oil is a perfect complement to any OEM or aftermarket wet clutch. Visit www.rekluse.com to learn more.
- Inspect your OE cable for fraying and replace if needed.



TOOLS

 10 mm	 8 mm		
10 mm socket	8 mm socket	Metric Wrench	Torque Wrench
	 5 mm		
Pick	5 mm Hex key		

INCLUDED PARTS



Item	Description	Qty.
65	Steel drive plate with wider internal diameter - .048 in (1.2 mm)	2
60.2	Pressure plate springs	3

65.1	Steel drive plate - .048 in (1.2 mm)	5
67	Curved outer edge steel drive plate	1
68	Steel drive plate - .060 in (1.5 mm)	2
68.1	Steel drive plate - .065 in (1.6 mm)	2
69	Thick friction disk - .118 in (3 mm)	2
69.1	Friction disk	9
69.2	Friction disk with a wider internal diameter	1
70	Basket sleeve	12

Visit www.rekluse.com/support for
a full parts fiche illustration and part numbers.

PREPARE BIKE FOR INSTALLATION

1. Stand the bike up on a suitable bike stand.
2. Drain the radiator fluid according to the OE service manual.
3. Drain the oil according to the OE service manual.

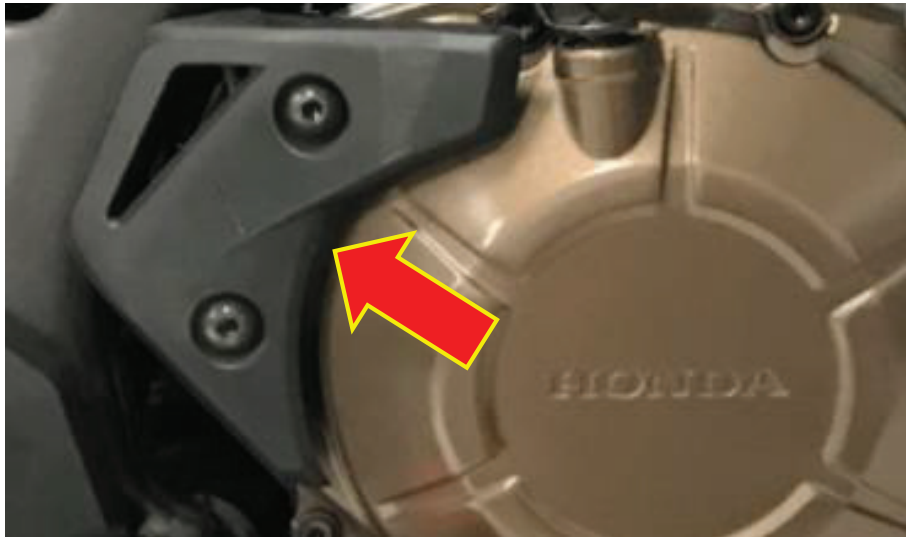


DISASSEMBLE CLUTCH

1. With the radiator fluid and oil drained, remove the coolant lines attached to the clutch cover by loosening the c-clamps and disconnecting the hoses. *Plug the coolant lines to keep them from dripping while you work.*



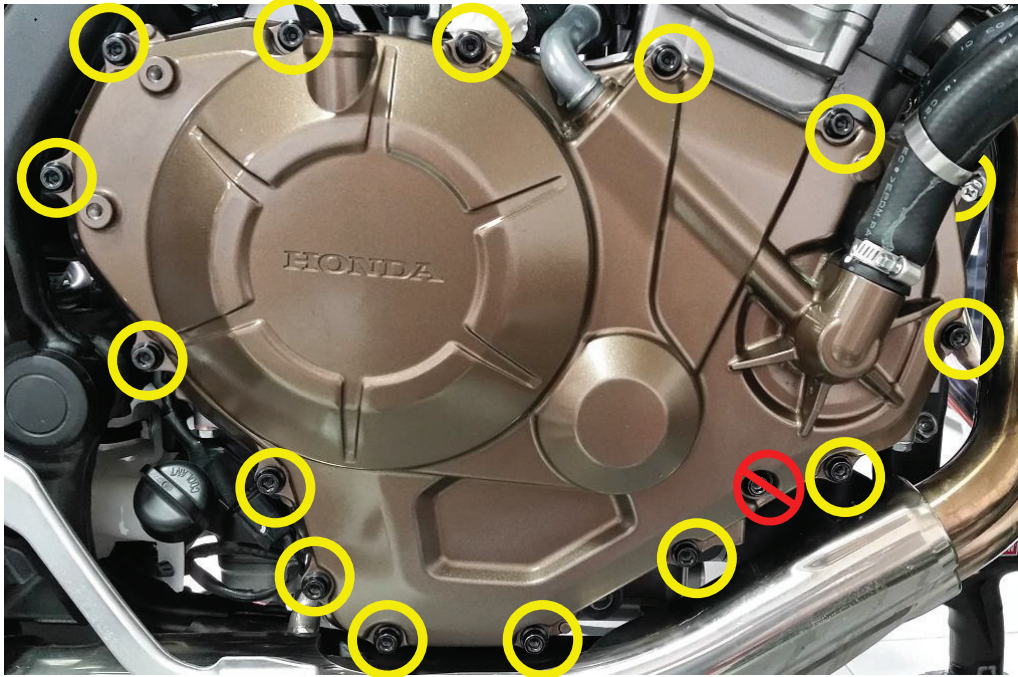
2. Using a 5 mm hex key, remove the rear engine guard from the clutch cover.



3. Unhook the clutch cable from the clutch actuator arm.

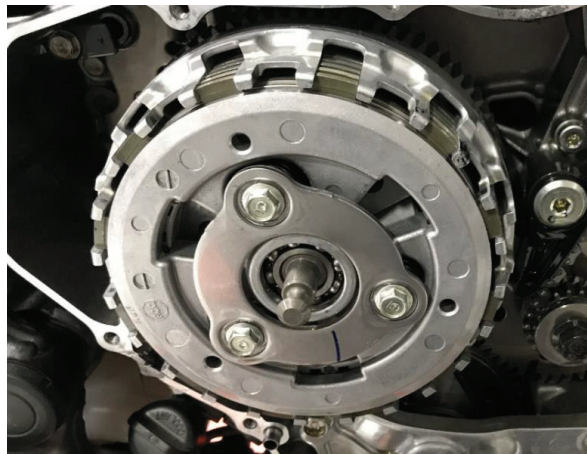


- Using a 5 mm hex key, remove the 15 clutch case cover bolts, then remove the cover. Catch any fluid that drips into a suitable container.



Note: It is not necessary to remove the coolant drain bolt to remove the cover.

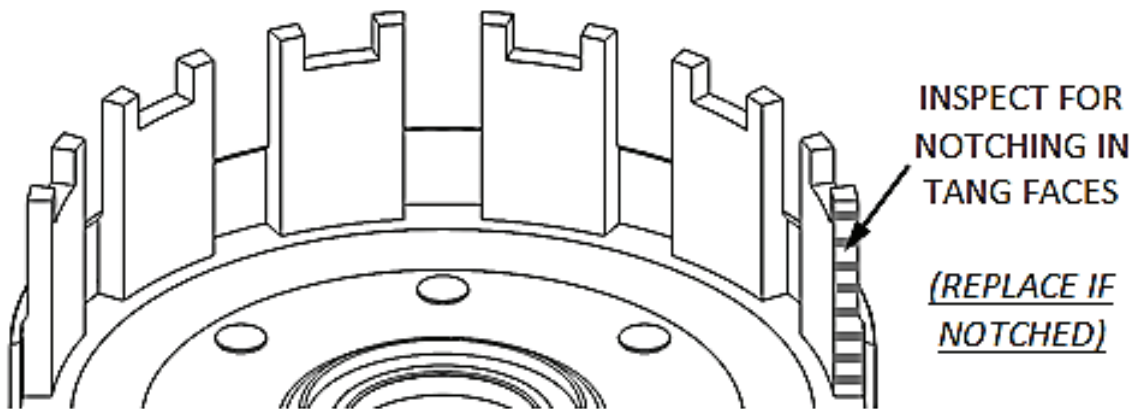
- Set the clutch case cover and cover gasket aside. They will be reused.
- Use a 10 mm socket to remove the pressure plate bolts. Set them aside. They will be reused.
- Remove the spring ring, pressure plate springs, and the pressure plate. Set aside the spring ring and the pressure plate. They will be reused.



8. Remove the OE clutch pack. Use a pick if necessary to help remove the pack.
9. Remove the OE judder spring and seat. Set these aside. Only the judder spring will be reused.
10. Inspect the clutch basket for damper/cushion play or notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces or worn dampers can cause the sleeves to break. Do not use baskets that have been filed, machined, or modified on the tangs. Replace basket if necessary.

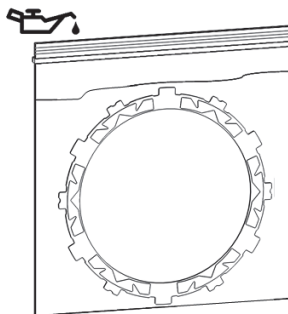
⚠ WARNING

Failure to inspect the basket and replace if necessary could result in death, serious injury, and/or property damage.

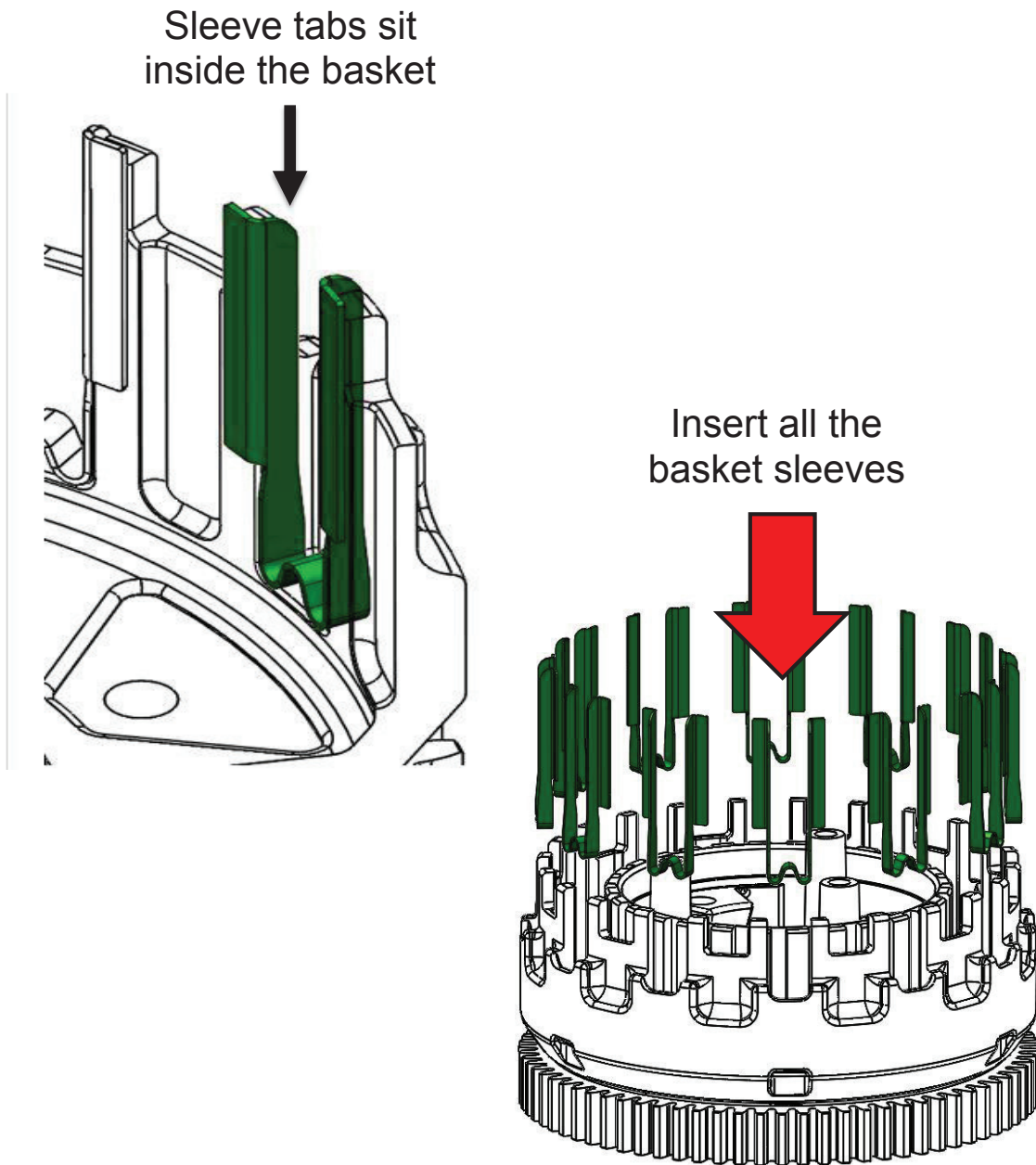


INSTALL THE CLUTCH PACK

1. Soak the friction disks in new engine oil for 5 minutes. Make sure the friction disks are coated in oil on both sides.



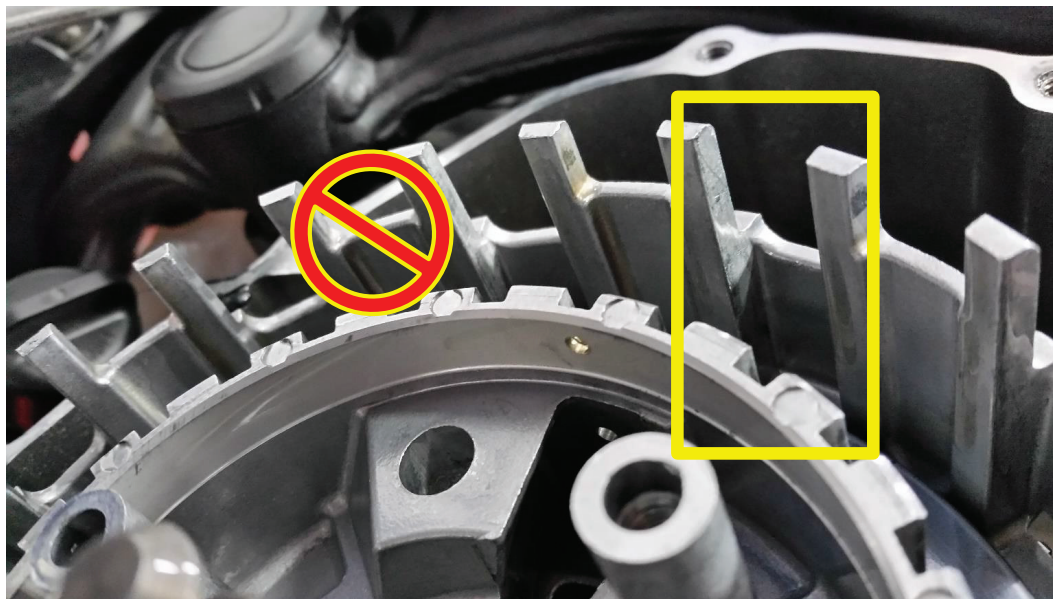
2. Install all the Rekluse basket sleeves into the basket slots. Make sure the bottom of the sleeve is facing down, and the sleeve tabs sit against the inside of the basket. (See pictures for reference.)



Note: When seated in the basket, the sleeves will stick slightly above flush with the top of the basket. This is normal.

Notes for clutch pack installation:

- *Separate the steel drive plates and friction disks according to thickness and type. This will speed up the installation. The clutch pack includes:*
 - 2 steel drive plates – .060” (1.5 mm)
 - 5 steel drive plates – .048” (1.2 mm)
 - 2 steel drive plates with wider internal diameter - .048” (1.2 mm)
 - 2 steel drive plates - .065” (1.6 mm)
 - 1 curved outer edge steel drive plate
 - 9 friction disks
 - 2 thick friction disks - .118” (3 mm)
 - 1 friction disk with a wider internal diameter
- *Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.*
- *When installing the clutch pack, note the position of basket slots. Some OE basket have “half slots” at the top of the basket tangs. Do not use the “half slots.” Rekluse products require the entire clutch pack be installed into the MAIN (deeper) basket slots.*

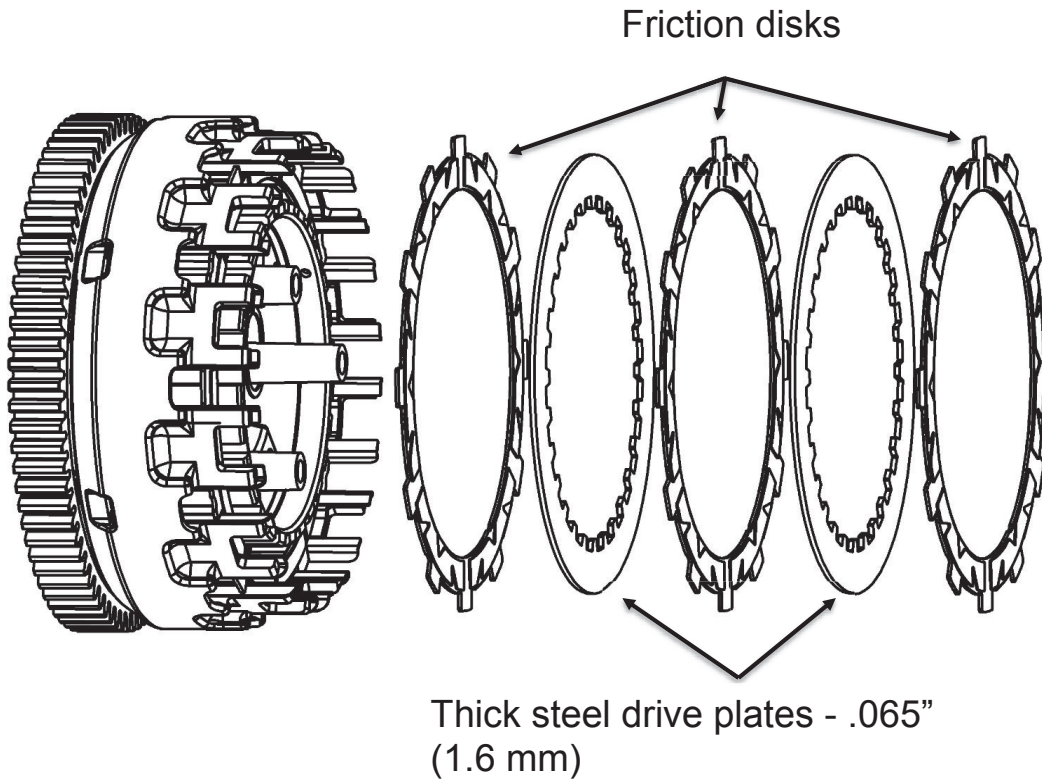


- *If the basket sleeves fall forward while installing the clutch pack, use a pick to push the basket sleeves back into place.*

3. To simplify installing the clutch pack, the pack is installed in 4 sections that continuously build on each other in the basket.

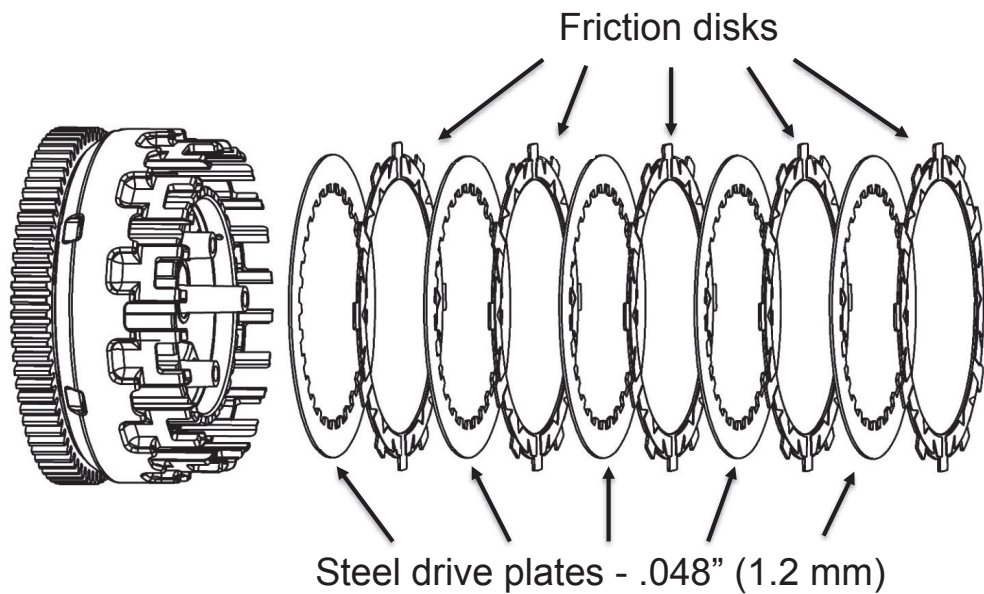
Section 1:

- a. Install a friction disk first, then install a .065" (1.6 mm) thick steel drive plate, followed by another friction.
- b. Install the second thick steel drive plate, then install the other friction disk.



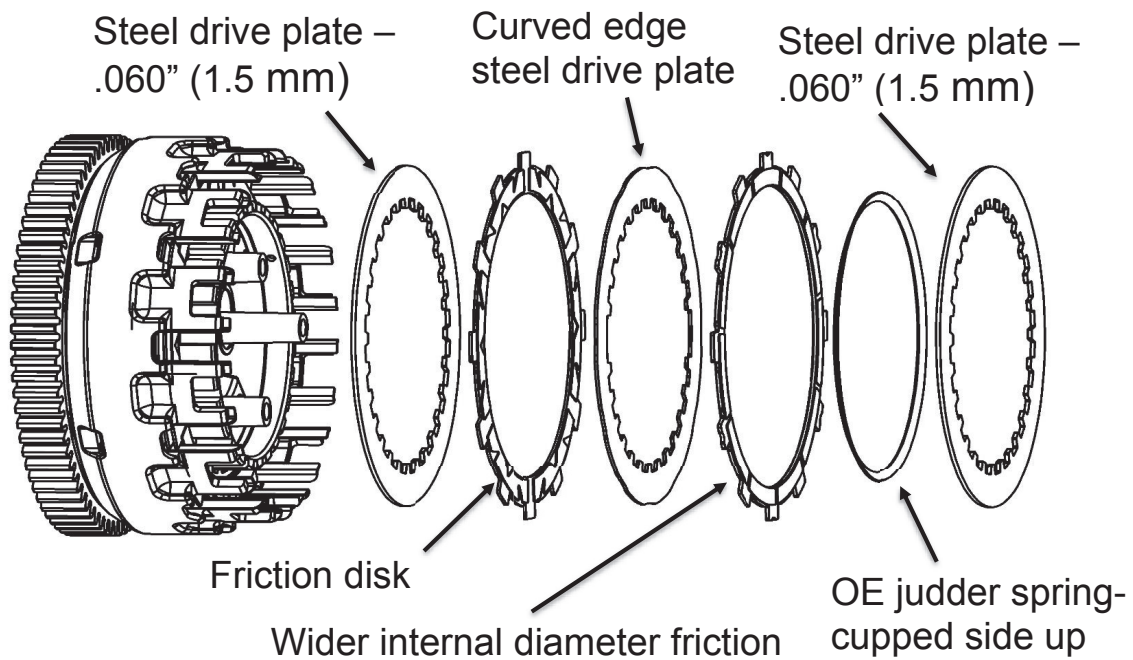
Section 2:

- c. Building on the last friction disk, add a .048" (1.2 mm) steel drive plate, then install a friction disk.
- d. Continue to alternate 4 steel drive plates with 4 friction disks, ending with a friction disk on top.



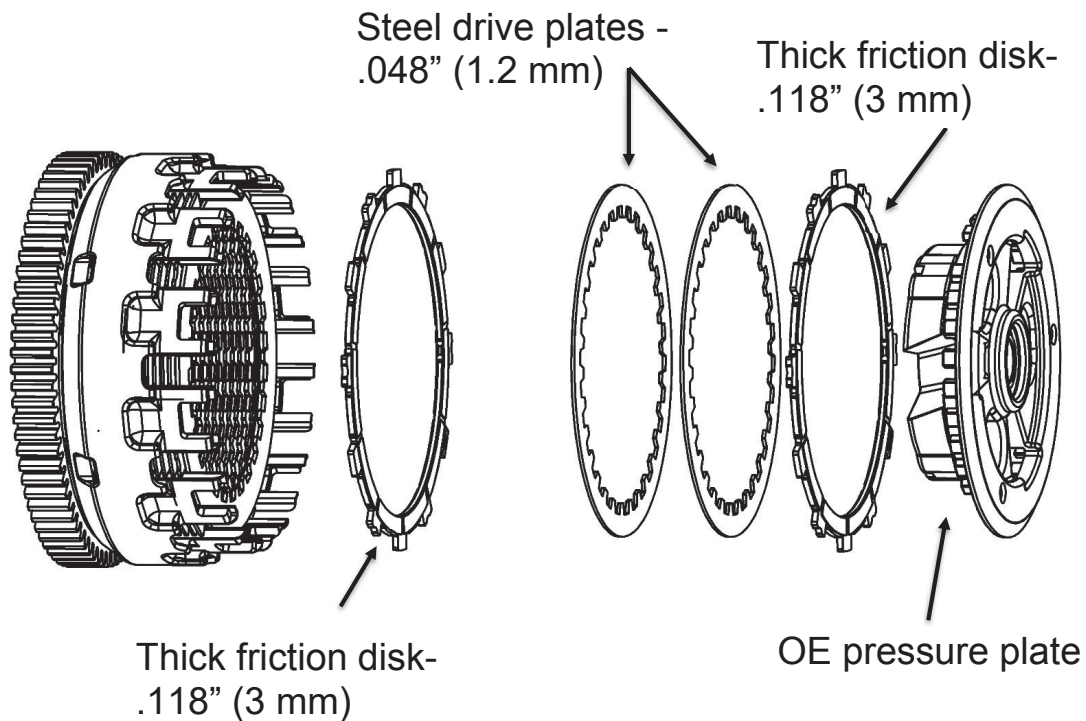
Section 3:

- e. Building on the last friction disk, add a .060" (1.5 mm) steel drive plate, then add a friction.
- f. Install the curved edge steel drive plate, then the wider internal diameter friction disk.
- g. Install the OE judder spring cupped side up, then install the other steel drive plate.



Section 4:

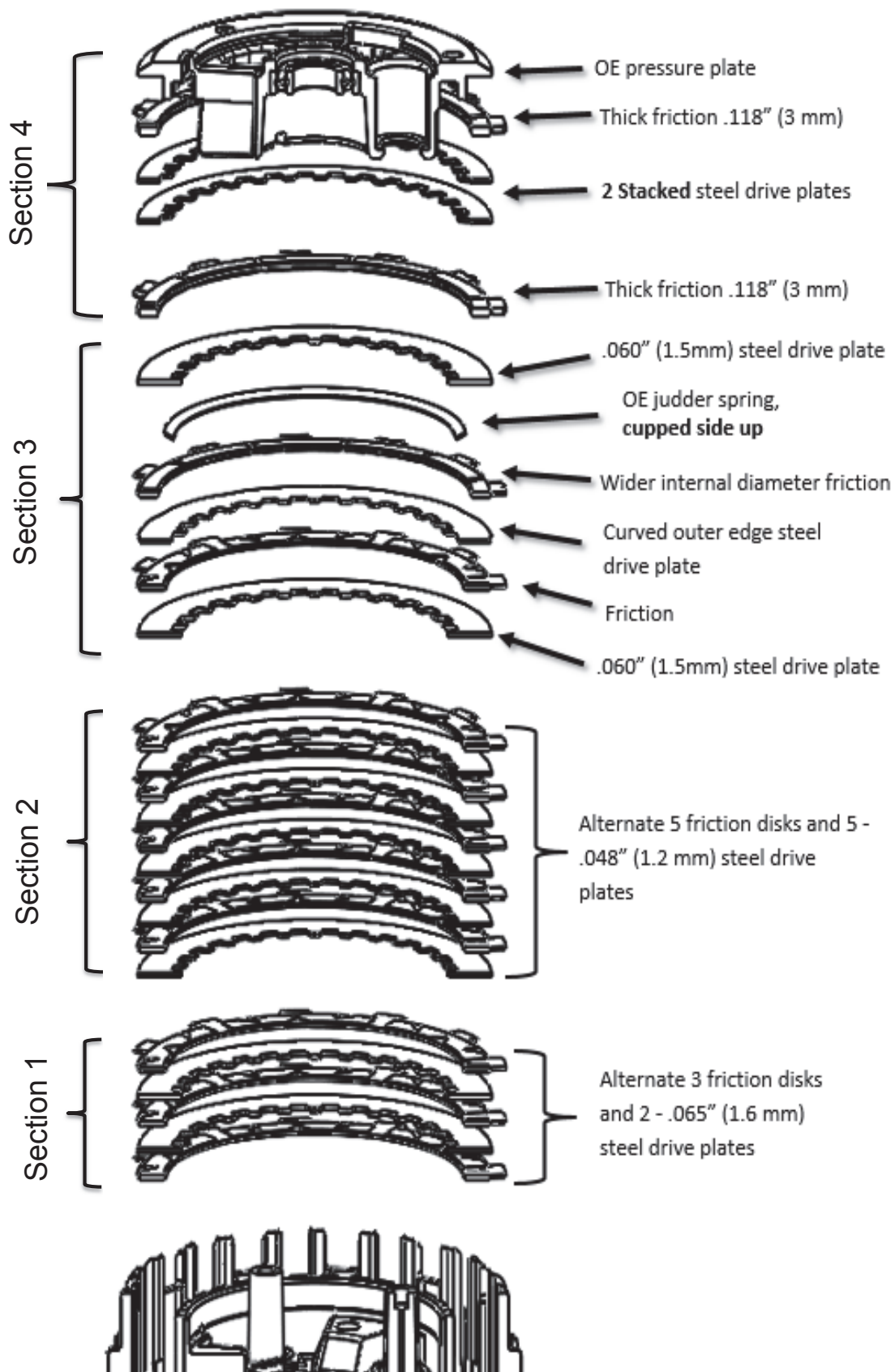
- a. Building on the last steel drive plate, add a .118" (3 mm) thick friction disk.



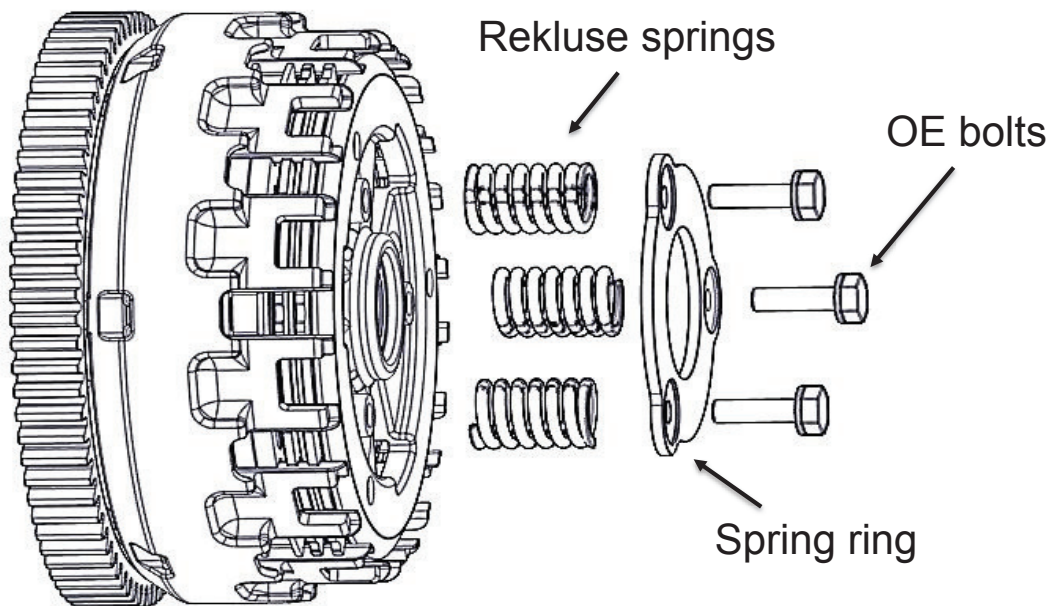
- b. On a workbench, turn the pressure plate over and place the last thick friction disk onto the pressure plate.
- c. Add both .048" (1.2 mm) steel drive plates with the wider internal diameter (stacked together) onto the pressure plate.
- d. Join the pressure plate sub-assembly with the inner hub by lining up the friction disk with the friction disks in the hub then pressing them together. *When seated correctly, the pressure plate will fit tight against the hub and not move.*

Note: *If the pressure plate moves once installed, you may need to move it back and forth slightly to align the pressure plate tabs with the hub notches.*

Full clutch pack overview



4. Insert the new Rekluse pressure plate springs, then reinstall the spring ring.
5. Reinstall the OE bolts. Torque the pressure plate bolts to OE specifications.



INSTALL THE CLUTCH COVER

1. Remove the plug from the coolant line located inside the clutch case if one was used during installation.

Note: Check that the tension spring inside of the clutch cover case is positioned touching the cover.



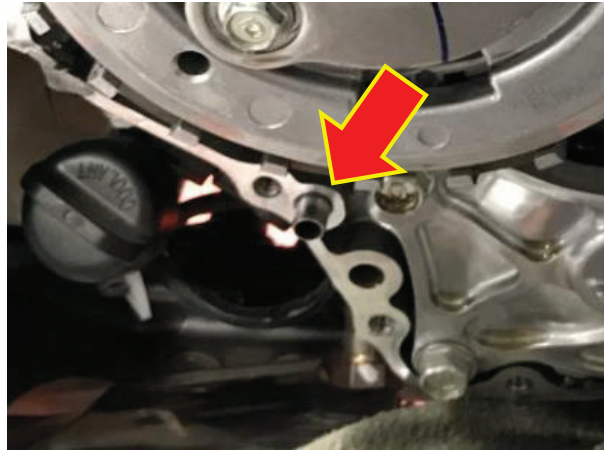
Correct



Incorrect

2. Install the OE gasket and clutch case cover being careful to line up the gasket and cover with the 2 alignment pins.

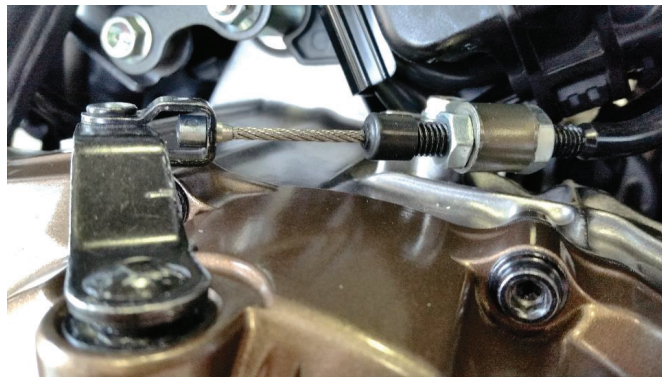
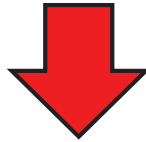
Note: One pin is located below the clutch and one is behind the coolant line. If a pin is missing, check to see if it is stuck on the back of the clutch case cover.



3. Line up the water pump drive with the water pump in the side case, then reinstall the OE clutch case cover.
4. Reinstall the OE clutch case cover by lightly tightening the cover bolts in a star pattern. Tighten bolts in small increments before torquing the cover bolts to OE specifications.
5. Reinstall the coolant lines, then tighten the clamps. *Be sure to remove any plugs used to block the lines during installation.*



6. Reinstall the clutch cable into the clutch actuator arm.



7. Using a 5 mm hex key, reinstall the rear engine guard onto the clutch case cover.



8. Refill radiator fluid according to the OE service manual.

9. Refill oil according to the OE service manual.

10. Reassemble the bike panels according to the OE service manual instructions.
11. Check the clutch lever for free play. The clutch lever should move smoothly when it is pulled toward the handlebar and return quickly when it is released.

Note: Stock free play is the amount of lever movement from the perch to clutch lever engagement. Clutch lever freeplay should measure .05-1.5 mm.

12. Adjust free play using the threaded cable tension adjuster by the clutch cover or by adjusting the tension with the perch adjuster.



BREAK-IN

- The clutch will break in within 100-200 miles of normal riding. Until break-in is complete, you may experience more clutch drag than normal.
- It is recommended to do an oil change after the first 1,000 miles to drain any excess clutch debris that occurred from break-in.

MAINTENANCE

To keep your clutch performing at its best, perform regular maintenance on your bike and clutch.

- Keep up with regular oil changes according to the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.
- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements.
- Inspect all of your clutch parts for signs of wear or excessive heat, and replace components as necessary. This includes your basket sleeves and dampers. Clutch wear is dependent on the riders use.

Maintenance Protocol	Maintenance Intervals
Inspect all clutch parts for excessive wear or heat. Replace as needed.	Refer to OE service manual
Change oil, inspect and clean oil screen	Refer to OE service manual

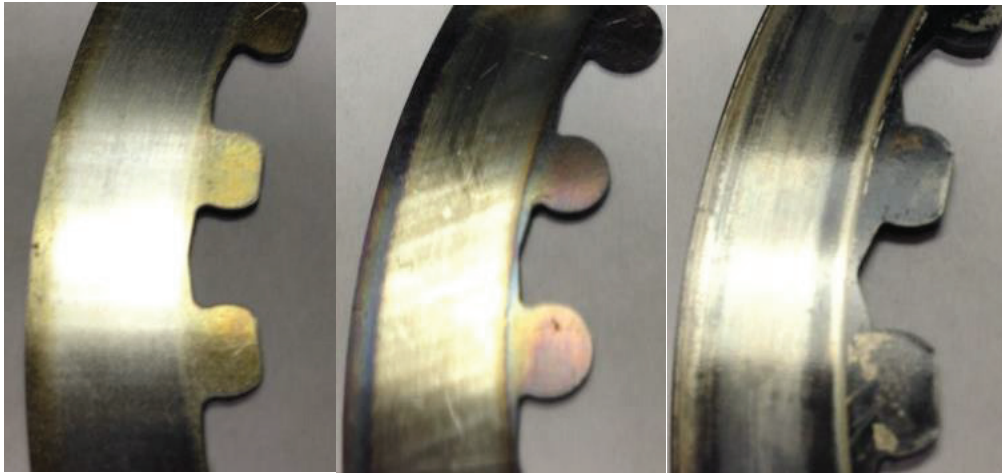
- Measuring the clutch pack can help determine if the components need replacing.
 - Minimum clutch pack height: 1.546 inches
 - Maximum clutch pack height: 1.594 inches
- Repeat the break-in procedure anytime you frictions disks. Always soak friction disks in oil for at least 5 minutes before installing.
- Replace friction disks if they measure below specifications or if the disks are glazed and/or burnt.
- Replace the drive plates if they show signs of excessive heat.

Disk inspection examples

When inspecting the clutch pack, the following pictures can be used as a reference. **These are best viewed in color by viewing this install document on www.rekluse.com/support.**

Drive Plates – If the clutch pack is getting high amounts of heat, purple, blue, or black color can be seen on the drive plate teeth. See pictures below.

Note: *Not all drive plates look the same and may look different than pictured.*



Normal Heat

High Heat
(Blue)

Excessive Heat
(Black)

Friction Disks – Due to the dark color of the friction material, the friction disks will appear almost black as soon as they are put in oil. During inspection, look for glazing of the friction material. Glazing will appear shiny and feel like glass, even after oil is cleaned from the friction disk.

Note: *Not all friction disks look the same and may look different than pictured.*



Normal Friction



Glazed Friction

TROUBLESHOOTING

Performance issues

If you find yourself constantly adjusting Free Play Gain or adjusting for drag, the clutch disks might be worn. Excessive heat or clutch slip can cause premature clutch failure as well. Once extreme temperatures are reached, irreversible damage will occur.

- Inspect all of your clutch parts for signs of wear or excessive heat, and replace components as necessary. Clutch wear is dependent on the riders use.
- Measuring the clutch pack can help determine if the components need replacing.

Clutch noise

Although it is harmless, some bike models may have noise coming from the clutch at low RPM as it engages. Clutch noise is caused by the clutch components vibrating as the clutch engages and can become more audible as the clutch gets hot. Adjusting the installed gap will NOT affect clutch squeal or chatter.

For bike models that have noise, here are some recommendations to reduce or eliminate it:

- Change the oil: Rekluse recommends that you have fresh, clean JASO-MA or JASO-MA2 rated oil for best clutch performance. Dirty or old oil can make the clutch more likely to squeal or chatter.

NEED ADDITIONAL HELP?

Website

www.rekluse.com/support

Frequently asked questions

www.rekluse.com/faq

Support Videos

www.rekluse.com/support/videos

Phone

(208) 426-0659

Technical Support

Contact Technical Support for questions related to product installation, tuning, and performance.

Technical Support hours:

Monday thru Friday: 8:00 a.m. - 5:00 p.m.

Mountain Time zone

Email: tech@rekluse.com

Customer Service

Contact Customer Service for additional product information, orders, and returns.

Customer Service hours:

Monday thru Friday: 8:00 a.m. - 5:00 p.m.

Mountain Time zone

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